# **EVALUATION of the COLLABORATIVE AGRIBUSINESS SUPPORT PROGRAM**

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#### PREPARED FOR THE OFFICE OF AGRICULTURE AND FOOD SECURITY (AID/G/EG/AFS)

OCTOBER, 1998

(Review comments incorporated, January 1999)

Contractual Services provided by USDA/FAS Office of Professional Development and
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# AID CASP EVALUATION

## **Executive Summary**

The period of the evaluation of the CASP was marked by profound changes within AID: general budget reductions and program re-allocations; a Reduction in Force; and an agency wide reorganization. In general, these changes left AID program managers in limbo as the consequences worked through the agency. In particular to CASP, the Grant Agreement to finance CASP was never funded at the original, estimated level and an expected Basic Ordering Agreement (BOA) was never executed.

Performance of the member universities was difficult to measure in this changing environment. Annual budgets and therefore annual plans became guessing games as notification of annual contributions to the grant agreement came at the eleventh hour. Annual planning cycles were reduced to days or weeks when budget information became available. At one point, a decision to cancel the program was put forward and retracted with weeks, reflecting not only the implications of agency wide budget and program changes but the political pressures put on AID managers to continue the CASP. Political influence on behalf of the four universities became a common theme during the life of the program, a situation not unique to CASP. The expectation that CASP would continue unchanged, because of political support from the Hill, was openly expressed by some in the university community.

Against this background performance of the member universities has to be measured less against initial performance indicators than their efforts to maintain, under shifting conditions, a higher level of activity than reasonable people could expect. In this regard, the evaluation team applauds efforts taken by many individuals associated with CASP to continue to respond to requests for assistance.

At the same time, taking into account these unexpected changes, university performance could have been better, especially in regard to expected program collaboration among the four universities. In general, each university continued with the same agenda which existed before CASP. The rare exception was with the fifth member of the Program, the PanAmerican Agriculture School in Zamorano, Honduras. Some of the CASP members worked individually with Zamorano on activities in Central America. No other incidences of CASP collaboration were found except in cases involving the budget from AID.

As requested, suggestions for any future follow-on program were included in the evaluation and are discussed in more detail below and in the body of the report. The next step, it would appear, is a design period to examine more closely the working environment for "food businesses" supported by an AID follow-on grant and the particulars of working with US universities toward this end. (In the initial briefing by AID the evaluation team was informed that a new project would be re-bid and limited to US Universities. The evaluators concurred with this decision, with caveats, by the end of the evaluation.)

More summarized information is provided in the following pages on key points in the evaluation.

## **Setting for CASP.**

CASP operates in a changing world: major policy shifts around the world and a new focus on trade liberalization included agricultural products for the first time. Creation of the World Trade Organization provides institutional strength to the continuation of trade liberalization.

At the same time, downsizing is the key word in the public and private sectors worldwide. Structural adjustment loans and required policy reforms means that government provided services in the

developing world are no longer available. Reduced AID staff in fewer missions focusing on agency priorities, not including agriculture, often eliminate the natural technical and administrative contact between AID and agricultural programs like CASP.

#### Performance.

- A. All universities showed initiative to compensate for the loss of the BOA and reduced support from AID.
- B. The university base which supports CASP is four land grant universities in states with very important agricultural industries. Campus rhetoric recognizes the importance of expanding an international dimension to teaching and research mandates; institutional changes to facilitate and fund international activities are slow to follow.
- C. The one Agricultural Development Center, the Pan-American Agricultural School in Honduras, demonstrated the value of the Regional Development Center concept of the CASP design.
- D. Little program synergism was seen among the four CASP members in field activities. Some was seen with the Regional Development Center, Zamorano, Honduras.

#### Issues and Observations.

- A. Policy reform has not been followed by policy implementation. CASP success is part of and depends on implementation of broad market oriented policies. In general, progress on this front is piecemeal. The result is a disharmony between policy pronouncements and the public and private institutional base to implement the policies. A new program needs to be prepared to assess the policy framework, including institutional policies, to make judgments on which food industries offer the greatest probability of success.
- B. University model for project implementation. CASP members used two basic models to administer CASP funds. One is "internal" to the university, placed within a department and part of the department teaching and research agenda. The second is "external" in that a special unit is created outside of the departments of a college of agriculture. An internal model is considered to be more closely tied to broader university of college programs but increases bureaucratic delays in implementation. The external model operates with more flexibility but often is not tied to program goals or the university or college.
- C. University Grant Management. Universities rely on traditional practices to assign, normally, a single representative, a Principal Investigator (PI) often faculty, as the sole administrator of external grant funds. AID programs tend to be large and inter-disciplinary; the risk is that program goals may be sacrificed to the scientific interests of a single Principal Investigator.
- D. State politics and international programs. A conflict between broad public support to provide a helping hand to people abroad and to protect domestic food industries important for a state economy is masked by the long history of public universities participating in AID supported programs. This conflict accounts for a lack of state financial support for international dimensions for traditional research, education, and outreach programs. Domestic political interests influence the topics for the land grant university to address, often strongly. The longer-term benefits of expanded agricultural trade do not appear to be sufficient to account for short-term losses to higher cost domestic producers.
- E. The traditional trinity of Land Grant Universities and globalization. The opportunity for AID to have a positive impact on strengthening the international dimension of Colleges of Agriculture has always been

one of the sub-goals of AID/university programs. However, sources of state funding, as discussed above, limited this impact. AID grants which offer support for globalization goals of a given university, if important to that university, should be accompanied and reflected in college and departmental research, education, and outreach programs. If globalization is priority today of state governments -primary sources of funding for state universities--then one would expect to see a willingness to negotiate lower overhead rates, more creative contributions on the part of the universities to the AID program, and limits on the amount of project administrative personnel funded by a project.

- F. Commodity Focus. Identification of specific commodities at the beginning of a program is increasingly a hindrance as post-harvest targets change from loss reduction to market orientation.
- G. Food Business Support. New market oriented policy framework call for a different strategy and label to stimulate profitable food businesses.
- H. Reaching new food businesses. Reductions of staff in AID countries eliminate a traditional means of reaching citizens in that country, the presumed target of a new program. This is a difficult issue to resolve if AID moves forward to stimulate and support food businesses.

#### Lessons Learned and Recommendations for the Future.

- A. The absence of stable and predictable financial support had a strong negative impact on CASP operations. Under the terms stipulated by the Contracts Office, incorporation of CASP services into mission portfolios proved to be rare. In other words, the assumption that AID missions would use the Grant with their own funds by doing an independent procurement action proved to be invalid. A BOA is critical for any new program. (1)
- B. Policy shifts favoring trade and unregulated markets have created a new working environment for CASP. Opportunities to stimulate profitable food businesses require substantial technical information on food production, processing, and marketing. Focus on food businesses and not physical losses for specific commodities are needed.
- C. A US Land Grant University<sup>(2)</sup> remains the preferred lead institutional link between AID and expected private countries abroad. Technical issues are deeply science intensive (seed DNA, testing recommended technology, and market analysis). Additionally, such universities have long experience in building ties to other universities, commodity and trade associations, and other private companies engaged in food business. The next section briefly describes such a "virtual" university.
- D. The RFA should permit, as much as possible, creative approaches from respondents to stimulate food businesses in AID target countries. An overly prescriptive design and RFA is not indicated for a new project.
- E. One condition recommended for a RFA is a requirement for respondents to describe in detail the management (not limited to administrative steps alone) structure they want to use. Use of a traditional "Principal Investigator" does not match the interdisciplinary team concept required.

#### A Prospective Look at a Future Food Business Support Program

A. The institutional foundation for a new AID "Food Business Support" Program should be with a university with a strong domestic program to provide support to food businesses through interdisciplinary education, research, and outreach programs and have an active and politically supported international dimension to each. To meet AID requirements for a global "food business" program for

domestic and international markets, the selected university would have to demonstrate linkages with sources of expertise in international food trade including private sector commodity and trade organizations, professional organizations of food industries, other centers of technical excellence, and other supportive elements with a low cost, "virtual" system of cooperation. Policy analysis and implementation requires special focus. (3)

- B. The RFA should be structured in such a way to elicit the creativity of universities on how to create and support such a virtual "Food Business Support Center"; novel means of management and administrative arrangements to facilitate multi-disciplinary approaches on a quick response basis; how their domestic program base, with international activities, can be utilized to address AID goals; and how to create private sector to private sector linkages between AID targeted countries and international food businesses.
- C. The expected \$1 million annual allocation, \$5 million for five years, is barely sufficient to provide core services for a Food Business Support Program. The importance of a BOA to facilitate mission additions to the core program is cited above. Additionally, a grant to strengthen and expand the international dimension of a teaching, research, and outreach program of eligible university carries value to the eventual Grantee. The overhead rates should reflect the dual benefit of the AID Grant to achieve USG international objectives as well as to add to educational, research, and outreach activities for a domestic program. Accordingly, the authorized overhead rates should reflect this dual benefit. (4)
- D. USDA has an established overhead policy for research funds which pass to State research programs through the land grant system. A fixed rate is established and accepted for these funds, presently about 20 percent. This rate is below established overhead rates for other types of programs. AID should specify such a rate for this Grant. (5)

# An Evaluation of the Collaborative Agribusiness Support Program

#### I. Setting for CASP

AID has supported US University programs important for agricultural development for four decades. In 1993, four were joined under a master cooperative agreement called the Collaborative Agribusiness Support Project CASP). The universities and their commodity specialization are:

· Mississippi State University: Seed Processing and Storage.

· Kansas State University: Grain Storage

· University of Illinois: Soybeans.

· University of Idaho: Perishable Crops.

Individual projects, prior to CASP, dealt with "post-harvest" treatment of specific classes of commodities to either reduce post-harvest losses, consistently estimated at high levels, or to introduce

more efficient ways to introduce and manage new technology for food production, storage, and processing. Lower losses and increased productivity, it was assumed, would lead to higher availability of basic foodstuffs in the market place and on the farm. Clients were almost exclusively government agencies; beneficiaries were low-income consumers and producers.

In the last decade CASP members have been working in a changing world. Loans to developing countries from the IMF and World Bank for "structural adjustments" were conditioned on far reaching fiscal and monetary policy changes; the collapse of the Soviet Empire resulted in several "transitional economies" moving from centrally planned economic systems to market oriented economies and democratic political systems. Reduced roles for government agencies were required as public budgets were slashed. Government policies using price controls, trade barriers, and other administrative means for implementation are being replaced by calls for private companies to respond to market signals and reduced trade barriers to expand production, increase the value added of raw agricultural products, and seek higher-valued export markets.

These changes impact on CASP operations. The new policy framework changes loss reduction targets *per se* to profit targets where losses are measured not in physical terms but in monetary loss. Value-added processes are measured against the price of competing goods, often imported. The viability of food businesses depends on how well firms compete at "international prices" even in their home markets.

The demand for services from CASP should *increase* in countries where the new policies are stimulating interest in new businesses. There is a great deal of confusion to clear up as more and more food businesses and governments look to international markets to sell products as a stimulus of rural economies. What is discovered, most often, is that the transformation of production, processing, and marketing systems to deliver products to foreign markets is extremely difficult to muster. To begin with, foreign markets demand "post-harvest" or "processing" steps to meet detailed specifications for size, quality, environmental awareness, and food safety. Central America, for example, has developed a \$2-3 billion industry exporting fresh fruits and vegetables to the United States over the past 15 years by learning to produce and deliver products which meet U.S. standards, not the market requirements in Central America. Although many of the exported products, like melons, were traditionally grown, the ones exported to the United States are not the same grown for the domestic market. The products exported are called melons but they are new varieties of smaller size, higher sugar count, no visible scars or sunburn, no pesticide residue, and travels to US markets via refrigerated comfort to meet consumer preferences and price expectations.

This market determined transformation of agricultural products to higher value-added consumer and industrial goods is not easy, as experience demonstrates. But the key to economic development in the next century lies in the success of developing and transition economies to modernize agriculture. While some development theories suggests that a modern agriculture sector is not a requirement for sustained economic and social growth, (food can be imported) historically only the city states of the modern era have reached a stable level of economic prosperity without an agriculture sector to produce cheap food (not all food) and buy consumer and industrial products from domestic industries.

The future will see more and more attention to competitive pressures to producers and buyers of agricultural products. As trade barriers continue to fall, and individual governments cannot ignore violation of "trade rules", international competition for domestic and international markets will sharpen. [6] Individual countries have a natural advantage for some products close to home as transport costs limit foreign suppliers. This will often be sufficient to create market niches for domestic producers. What finally matters in not the size of the agriculture sector but the efficiency in which it provides a

standard of living equivalent to jobs in other economic sectors.

This CASP evaluation was commissioned to examine performance of the four primary universities under the CASP and one foreign agricultural college, the only Regional Development Center established under the current five-year program. Performance was evaluated with special attention to identifying any "lessons learned" from the five-year life of CASP. Such lessons learned become the foundation for a prospective look at what a new program, following CASP, should address to deal with post-harvest issues under market-oriented policies and global markets.

## II. Performance of CASP: Individual Members and the Group.

#### A. Important AID Changes

Several major changes occurred within AID, during the life of the Grant, which impact directly on the ability of CASP universities to operate. First, a major re-organization and Reduction In Force was accompanied by general budget reductions and re-allocations away from agricultural programs. Over the life of the Grant these actions translated to grant disbursements less than 75% of the original program (or "estimated amount of the Grant"). Implementation plans were disrupted as year to year budgets were not known in advance to plan the year's activity; some approved functions were eliminated. In general, programs were reduced to core funds ("salaries for essential staff") with small allocations for overseas operations. (More on how universities responded to this below.)

The second change occurred early in the grant. A Basic Ordering Agreement (BOA) had accompanied earlier grants to facilitate funds transfer from field missions who desired to incorporate post-harvest activities into their country programs. By setting authorized expenditures beyond estimated core funds, to accommodate funds from field missions, AID could be confident that the level of funding to accomplish mutually agreed global objectives could be available and that the activities undertaken would be directly linked to bi-lateral country programs. The BOA was never approved for use with the Cooperative Agreement. Interviews with the Contracts Office suggested two reasons:

- 1. The line between Grants and Contracts had been blurred to the extent that a clear distinction between a Grant and Contract (different regulations) was questioned. No clear evidence was suggested that a breech had occurred but the concern of excessive intervention by AID officers on the use of grant funds was sufficient to prohibit the authorization of a BOA.
- 2. The other reason cited was the distribution of workload between AID/W contract services and mission or regional level contract services. This view favored the notion that the responsibility for preparation, negotiation, and authorization of country specific funds lay with mission grant officers even though the master grant was authorized, funded, and supervised from the Global Bureau.

The first objection could be resolved, it appears, by in-service training for project officers on guidelines for Grant supervision, i.e., AID cannot direct the use of the grant funds as if it were a contract. The Grantee has this authority; AID funds are supporting the Grantee's program. The second objection appears to be more of a question of workload allocation between AID/W and field missions contract support services. Unfortunately, the unilateral decision to forego the BOA produced a negative impact on Grantee's ability to perform, undercutting the reason for AID to support the program in the first instance.

The combination of unsure and reduced financial support from AID and the elimination of the BOA placed the grantees in a difficult situation. Simply stated, the mutually accepted goals of the Grant Agreement were in doubt from the beginning. Performance of the CASP partners is evaluated with these factors in play. (See end note)

# B. Performance of the Collaborative Agribusiness Support Project.

1. History of CASP and the Four Universities.

The four units of the Collaborative Agribusiness Support Program (CASP), the Seed Science Technology Program (SSTP); the Post-harvest Institute for Perishables (PIP); the Food and Feed Grains Institute (FFGI); and, the International Soybean Utilization Program (INTSOY); were established as the CASP in 1993.

The SSTP was started by Mississippi State University in 1958, and has provided continuous support to USAID missions around the world for problems surrounding the production, processing, and management of improved seed management for specialized government agencies.

PIP was organized at the University of Idaho in 1980. PIP addresses the problem of high levels of food losses and market inefficiencies of highly perishable crops between harvest and consumption in developing countries.

FFGI was established at Kansas State University in 1966. This organization provides technical assistance, information services and training in grain and legume storage and marketing systems. Government agencies dominated the client list and continue to be important today under new policies.

INTSOY began in 1972 and is an internationally recognized center of excellence and source for soybean processing technology. Since 1985, INTSOY has concentrated exclusively on post-harvest technologies actions through applied research, training, technical assistance and information dissemination. Training, degree programs, technical advisory services, and applied research constitute the types of services provided by all CASP members. The mix of these tools to AID and other clients depends on several factors; funding is a primary determinant. A snapshot of CASP at each campus is presented here.

## 2. The CASP Administrative Unit at Mississippi State University.

Mississippi State University, home of the Seed Science Technology Program, provided administrative support for CASP. CASP was an administrative mechanism to bring together four peer university projects accustomed to operating directly and independently with AID support. (In AID jargon, doing more with less.) This grouping was not, as is commonly known, a marriage forged in heaven; it was conceived by a third party contracted by AID and a sense of "ownership" by CASP members of the changes was not noted. (10)

However, administrative functions are performed smoothly, communications among project leaders are constant, and friction over reduced budgets are kept to a minimum. Peace has been achieved and the accomplishment of the Director of International Programs at Mississippi State should not be underestimated. In the process, unfortunately, the point, which united CASP members, was not collaboration on post-harvest activities to produce synergistic approaches but on AID induced financial crises. Budget issues and political solutions were common topics of conversation, it appears. Examples of program synergy was seen only through isolated and small efforts with the fifth member of CASP, the

Pan American Agricultural College in Honduras (discussed below). (11)

Individual efforts to replace shortages in AID core funds reflects well on CASP. In spite of the low and uncertain allocations and the absence of a BOA, all members exhibited initiative in seeking other sources of funds to further program goals stipulated in the CASP grant agreement and the individual missions of each post-harvest program. One measure of this initiative is a measure of "leverage" as reported by the CASP Unit. This measurement is derived by dividing the total value of services performed by each university program by their allocation of the core CASP budget. This includes the CASP central office as a separate entity.

#### Table 1. Leverage Factor of CASP Members

MSU: CASP	KSU: FFGI	Illinois: INTSOY	Idaho: PIP	MSU: SST
1.54	1.70	2.32	1.56	1.91

These leverage measurements tell us how much additional funds over core financing were generated: 54 percent additional to the CASP Management Unit budget and the universities produced at least 56 per cent (PIP) over allocated core funds. INTSOY was particularly successful with 132 per cent of additional operational funds, due in part to ties to industry groups promoting additional exports of soybeans and vendors of processing equipment. In spite of resource limitations from the core AID Grant and the procurement difficulties introduced by the lack of a Basic Ordering Agreement, CASP members hustled to find other sources of funds.

The grouping of four universities into CASP had another, likely unintended consequence, in that political support from Congress for the member universities was consolidated. As budgets were being cut, CASP members called on congressional staff for assistance. It was successful; would it have been as successful if universities had remained independent with their separate grant agreements is open to speculation.

#### 3. Performance of CASP Members.

The individual members of CASP have a long history of providing practical technical advisory services and quality training to AID client countries. All have developed a worldwide reputation and continue to respond to requests for assistance from non-AID sources. The core support provided by the continuing AID grants has made this low-cost service possible but provides funds for only minimal follow-up.

The long and consistent performance of individual CASP members suggests a minimal set of questions to ascertain performance under the five years of CASP:

- a. Do individual members provide any indications that suggest reductions in the quality and quantity of services?
- b. Are the services provided today compatible with recent and radical changes over the last decade in the policy framework in developing and transitional economies? Will the individual university programs survive if AID financial support cannot continue?
- c. What lessons can be gleaned from CASP experience to provide guidance on new programs to address food production, value added processing, addressing global and domestic food safety issues, meeting competition from external suppliers, and reaching high value external markets.

The first two questions are briefly addressed now. Response to the third question is given in a separate section following the discussion on performance.

There is no indication of a deterioration of quality in the services provided by CASP members. Hard data to back up this statement is not available and could not be generated within the time allocated for the evaluation. It is always difficult to assess qualitative factors when services are being provided; this is especially true in economic and social development programs of AID. The issue is complicated by the fact that technical field staff in developing countries, the primary targets of a survey, are not easily available.

And there is also a transition taking place in each of the participating universities. Faculty who led in their respective fields is retired, often leaving a vacuum difficult to fill. As important, most AID agricultural staff who did provide qualitative judgments in the past (and who ordered the services) are also retired with few replacements in sight.

Counting activities by each member university gives us one measure but without comparative data for prior years, it is hard to speculate if activities increased or decreased. Indicators say that the level of activity is down. The basis for this opinion is gleaned from project reports, staff interviews, and the expected effect of budget cuts. Cost per unit of activity -advisory services, training, and applied research--have increased. Less money translates into fewer activities. Interviewees from all universities underscore this: the things that could be done far outnumber funds available. In addition, as university budgets tighten, expenses, which were covered informally by the universities to complement international activities now, have to be charged against specific accounts. Of course, a decreased emphasis on agricultural programs in AID and the shifting of personnel resources to non-technical areas contribute to the reduced demand. There are fewer people in AID missions to determine when and what kinds of services are needed. In summary, indirect information suggests that quality has been maintained but the quantity of activities has fallen.

The second question is are the CASP members responding to the radically different policy framework present in the client countries? The answer appears to be yes. Services provided to domestic businesses -farmers, processors, food industry organizations, and consumers - by land grant universities are tailored for the market place. This is so taken for granted in America agriculture that it rarely merits comment. The client base for each school is what constitutes the "private sector" in rural America: farmers, consumers, processors, and companies in retail and wholesale markets.

The issue for CASP is not how to tailor services for private parties but rather how to do so in these periods of transition from central based economic and social decision-making to dispersed private organizations responding to policies favoring de-centralized decision-making. And how does one reach the thousands of individual business decision-makers in agricultural systems in the absence of private institutions so common in the West.

a. Seed Science Technology Program: Mississippi State University.

The Seed Science Technology Program has the longest AID history and has consistently provided technical guidance and training on quality seed production, storage, and certification programs throughout the developing world. MSU outreach of technical staff and publications influenced certified seeds programs worldwide. During the five years of the CASP program, the number of activities fell, reflecting reduced AID budgets for agricultural programs. The reduced level of demand for services, along with faculty retirements, led to more uncertainty in the College and as senior tenured faculty retired, replacements were fewer and without tenure. However, the program remains active and the

following examples show the breadth of the Seed Technology Program at Mississippi State University.

#### MISSISSIPPI STATE UNIVERSITY SSTP 1993-1997

TRAINING, SHORT-TERM AND DEGREE PROGRAMS	RESEARCH MANUSCRIPTS & TECHNICAL BULLETINS	TECHNICAL ADVISORY SERVICES
Cotton Seed Production and Processing	Manual on Assessment of Seed Program in review	Equipment Specifications for Germplasm Conservation Unit
Three M.Sc. and one Ph.D. in Plant Science conferred	Harmonization of Seed Standards in Central America - Part II. Seed Technology Laboratory, Mississippi	
Training in Vegetable Seed Technology	State University. Assisted the Pan American Agricultural School (Zamorano).	
On the job training for kenaf seed weathering		
Training of Graduate Students from Bangladesh, Jordan,		
Mali, Mexico, Nigeria, Pakistan, Suriname, Thailand		
Attend ISTA Congress in Pretoria, South Africa		

The retirement of faculty pioneers of the international seed program has had an impact on the program. The loss of institutional memory can be detrimental to any program. A policy framework, which favors private production and management of seed programs, even mixed seed certification systems, requires new approaches and ideas. Past policy conditions dictated a public sector approach to seed programs with little attention to private elements operating in client countries.

The importance of the historical foundation, however, is considered as an asset today as the Seed Science and Technical Program "....served as the mainstay of international programs and has served the state and nation well." Mississippi State University so valued this program that five tenured faculty positions were assigned at a time when state political support for international activities was low. The paradox is that now tenure-track faculty positions are no longer assigned to the Program while state and university political support for internationalization of university programs is perceived to be high and growing. Of the four U.S. Land Grant universities visited, Mississippi State was most impressive in matching decisions and institutional shifts with political rhetoric on the importance of international linkages for the university and the state economy. The President of the University is the acknowledged leader of "globalization" of the university. The Seed Storage Technology Program of the College of Agriculture has a very supportive home base, even without tenured faculty.

While MSU is demonstrating a strong inclination towards a more global mentality there still are examples where traditional reigns. Antiquated administrative controls remain in place; overseas travel by

University personnel still requires approval of the State Governor's office. In spite of such impediments, a senior administrator nearing retirement in the College of Agriculture remarked that he would relish the opportunity to begin his career over with the opportunities and challenges of globalization of university programs.

The SSTP is found in a department of the College of Agriculture and will remain there, it was reported. As such, administration of funds was within the university system and management decisions were under the technical leader of the program. It is unlikely to disappear if external funds are not available. At the same time, paying clients are required to pay for international services.

## b. Post-harvest Institute for Perishables: University of Idaho

The Post-harvest Institute for Perishables at the University of Idaho was established in the early 1980's at a time when AID's attention focused on the very poor and food security issues. The organization and administration of PIP was assigned at the beginning to an external unit of the College of Agriculture, ultimately housed in university offices off campus. The appointed leader of PIP was drawn from outside the academic community. PIP has an informal designation as a separate department within the College, according to the Director.

The Dean of the College of Agriculture expresses no doubt as to the importance of international activities. Cooperative programs with Japan and China include younger faculty to lecture. He would like all faculties to bring international experience to their respective appointments. And he sees a more global attitude emerging.

The linkages between PIP, departments, and faculty depend on informal arrangements, developed over the years. The viability of PIP does depend on external funds. With only tenuous links to formal education, applied research, and outreach goals for the State of Idaho, financial support from the state is unlikely. While the importance of globalization on the economy of Idaho is noted -as a large agricultural exporter--the rhetoric has not yet been translated to significant financial support for international activities which can be perceived as supportive of foreign competitors or to replace imports now coming from Idaho. There is, reportedly, a strong interest among staff in the Idaho congressional delegation for AID to continue support with AID federal funds.

UNIVERSITY OF IDAHO
PIP
1993-1997
1776 1771

TRAINING, SHORT-TERM AND DEGREE PROGRAMS	RESEARCH MANUSCRIPTS & TECHNICAL BULLETINS	TECHNICAL ADVISORY SERVICES
I		

Fruit & Vegetable Seminar  Farm Business Accounting for Ukrainian Officials  Visit to Agro-processing and	"A Commodity Systems Assessment Methodology for Problem and Project Identification" by Jerry La Gra was initiated and financed with PIP funds.	Mozambique Cashew Rejuvenation Project visited by Cashew industry specialists including crop protection and plant breeding
marketing sector  Visit Dairy Operations in Northwest US		Morocco Agribusiness Promotion Project conducted a pre-feasibility study on pre-cut vegetable industry
		Equipment Purchase Assistance Semen from Brown Swiss to Russia/Ukraine
		Russian farm director asks PIP assistance for purchase of agricultural equipment
		Moving storage building equipment to Czech Republic from Russia
		New Zealand inventor of packaging material seeking US firms who might use his invention

The quality of services provided by PIP is considered high and valuable. It is known for finding highly qualified experts from academic or private firms who can address post-harvest issues with practical points of view. PIP's work in the Newly Independent States, for example, continues to be appreciated for the ability to begin and complete tasks under severe conditions.

The number of assignments has clearly fallen off because of reduced AID budgets. The transition to new market oriented policy frameworks is not difficult for PIP as many of the experts used either work directly with the private sector or are experts engaged in private businesses.

c. The Food and Feed Grains Institute at Kansas State University.

The Food and Feed Grains Institute (FFGI) served as a major source of technical services, training, and applied research since 1966 on grain storage topics related to management of government owned and operated facilities. Depending on the era, they also worked on smaller, regional and village level systems. They earned a reputation of practical training and useful technical advice. Applied research completed the package of services.

Kansas State is a member of the Midwest International Agricultural Consortium (MIAC), a group of five universities. Efforts to expand international funding through AID contracts proved to be fruitless and the universities changed strategy. Selecting Mexico as a primary collaborator, MIAC now has collaborative projects with at least three Mexican universities in several areas of mutual interest. The agreements require mutual contributions; MIAC and Mexican partners are funding, for example, approximately 20

Ph.D. students from Mexico as well as joint research projects with faculty and U.S. graduate students.

The Dean's office emphasizes the need for KSU graduates to be prepared for careers in a competitive global market. One out of seven jobs in US agriculture is related to the international sector, the Dean noted. However, faculty pointed to the absence of incentives, and the presence of penalties, for faculty engaged in international programs when tenure and promotions are on the table.

The Department of Grain Storage, a multidisciplinary department, (said to be the only one in the United States) is complemented by the Department of Agricultural Economics. The current FFGI Director fills a non-tenured position in agricultural economics. The fate of the FFGI, however, is not positive. The current director expects to retire at the end of the grant and the Institute will be incorporated into the office of the Assistant Dean for International Agriculture until outside support can be found. (12) The capacity of Kansas State to provide continued technical services continues although access will be more difficult.

The FFGI is placed within the College of Agriculture. The Director is the sole identified employee of the Institute and is a faculty member of the Agricultural Economics Department. The College of Agriculture provides support staff. A significant portion of CASP funds is used to continue support for faculty research and student initiatives. Effective working relations have been formed over the years with other departments but it is clear that the final word on what gets funded and when lies with the Director. He has developed a keen ability on how to use university mandated administrative systems. Some requests are dropped when he sees that the complexity of a particular contract cannot be done efficiently within the university. This expertise will be missed once he leaves.

#### KANSAS STATE UNIVERSITY FFGI 1993-1997

TRAINING, SHORT-TERM AND DEGREE PROGRAMS	RESEARCH MANUSCRIPTS & TECHNICAL BULLETINS	TECHNICAL ADVISORY SERVICES
Training in Information Services at KSU	Prepare Training Manual Entitled Agribusiness Management and Operations, Marketing Management  Prepare Training Manual Entitled Agribusiness Investment Decision-Making: Market & Supply Analysis  An Analysis of Market Collection in Albania  Automatic and Computerized Mechanical Sieve Shaker  Processing Procedures Involving Corn Contamination  Productivity Enhancement of the Wheat Flour Milling Process	Haiti Productive Land Use Systems Project  Uganda Post-harvest Handling Project demonstrated a variety of small grain related machines for use in Uganda  Grain Storage Losses by CARE, CRS & World Vision  Sustainable Agriculture reference database  FAO INPHO Project  Forage website promoted  PHDS Database Web Searching Engine Completed

#### Chilean Grain Market

Borsdorf, R. 1997. Analysis of Retail Market Food Prices in Albania, Staff Working Paper No. 4. Food and Feed Grain Institute, Kansas State University

Reed, C. et.al. 1997. Technical Support for Grain Storage/Losses Program, World Vision Relief and Development. Technical Assistance Report No. 141. Food and Feed Grains Institute, Kansas State University

Borsdorf, R. etal. 1997. Technical Support for Grain Storage Losses Program, CARE Items 1-4. Technical Assistance Report No. 142. Food and Feed Grains Institute, Kansas State University Central American Outreach effected in meeting with Monica Carballo from Costa Rica's Consejo Nacional de Produccion (CNP) and the Information Support Services for Agriculture (ISSA).

Workshop Planned for Latin-American Post-harvest Collaborators

Wheat Quality Database

Training capacity resides primarily in the Department of Grain Storage; the Director works closely with faculty and passes on training requests to them. Applied research and technical advisory services occupy the attention of the Director, primarily supporting faculty at KSU and hiring individual experts. An Information Services program was initially supported in part by CASP (as was the case in PIP). When budget cuts came on, the concept, utility, and capability of this small unit was recognized by the Dean of Agriculture and it was moved, with College support, to the university library. There is a strong case for additional funds could accumulate databases on post-harvest, (all support for the information unit at Idaho was eliminated) and have them available on the Internet.

## d. INTSOY at the University of Illinois.

INTSOY is housed in the Department of Food Science, a result of a recent re-organization of the College of Agriculture. Illinois is one of the "Big Ten" universities and counts about 36,000 students; eleven thousand are graduate students and 40% of them are foreign. The university is a major international university in education, research, and outreach programs independent of funds from AID. Globalization of world markets -Illinois is a major exporter of soybeans, corn, and other agricultural products--is receiving additional attention and funds.

As the name implies, the INTSOY program is dominated by training, applied research, and outreach programs for utilization of soybeans. There are very close relations with private firms and organizations for processing equipment and soybean marketing programs. These are important linkages for INTSOY. Soybeans are so important to the Institute that the evaluators heard little of any other oilseed until the last day, when it was mentioned that the capacity to deal with a broader category of edible oil sources is also present within the College of Agriculture. This focus on soybean utilization clearly serves the interests of the University. A broader view to include processing of all edible oilseeds would be more useful to AID.

UNIVERSITY OF ILLINOIS INTSOY 1993-1997

TRAINING, SHORT-TERM AND DEGREE PROGRAMS	RESEARCH MANUSCRIPTS & TECHNICAL BULLETINS	TECHNICAL ADVISORY SERVICES
Soybean Processing and Utilization at U of IL	Soy milk based yogurt products	Response to Technical Inquiries
Soybean Processing	Evaluation of Soybean Varieties for the Korean Tofu Market	Food Processing Curriculum at Zamorano
Soybean Processing of one week course	Low Cost Extruders for Textured Soy Protein	Visitors to see overview of soybean processing technology,
Soybean Marketing and Distribution	INTSOY Home Page Activated	procurement of US soybeans and information of soybean products.
Soybean Processing for the Russian Private Sector		Perfecta Curitaba company representatives visited to present lectures to training course
Two Africare representatives visited INTSOY		rectures to training course
INTSOY attended the International Food Legume Research Conference III in Adelaide, Australia.		
INTSOY attended the Soy Food Expo '97 in Mexico City to promote trade between American Agro businesses and the Mexican private sector		
A delegation of (black) Land Grant University representatives visited INTSOY		

INTSOY is very likely to continue to provide international services regardless of AID funding. This is an important institution for the College to service an important agricultural industry in Illinois through direct and indirect means. It is placed within the Department of Food Science and the Director reports to the Department Chair. Relations with other departments appear to be excellent and private sector linkages are very good. One of our most fruitful round-table discussions arranged by INTSOY consisted of private firms, and a representative of the American Soybean Association. These are valuable contacts for Illinois and potentially for AID.

e. The Pan-American Agricultural School in Zamorano, Honduras.

Zamorano, the name associated with the Pan American Agricultural School (Escuela Agricola Panamericana), was selected as a Regional Development Center as a component of CASP. It was the first and only center selected. This private agricultural college passed the half-century mark several years

ago; its reputation for turning out high quality graduates is known throughout Central America and several countries in South America.

Zamorano is a natural candidate for the Regional Development Center for Central America. It is well known and respected throughout the region, the high quality of faculty and staff is recognized, and there are several AID missions nearby. Located in Honduras, its range of influence is broader, beyond Central America. They have several research and degree linkages with US universities. The experience with Zamorano testifies to the wisdom of including Regional Development Centers in priority areas for CASP and any future project.

# ESCUELA AGRICOLA PANAMERICANA-ZAMORANO EAP 1993-1997

TRAINING, SHORT-TERM AND DEGREE PROGRAMS	RESEARCH MANUSCRIPTS & TECHNICAL BULLETINS	TECHNICAL ADVISORY SERVICES
Development grants to provide specialized training to cooperative and community organizations to	CSAM Driven Examination of "El Caso del Vinagre Natural en Honduras"	Agribusiness Assessment (student theses)
teach basic management systems, processing procedures, and marketing links. The products	Constraints Analysis Study for Central American Countries	Agribusiness Development Workshops
associated with the three grants were Jocote (tropical plum), chocolate/soy drink, and a bath accessory made		Planning seminar using ZOOP method
from a tropical plant from the squash family.		Management Information Services for Small Private Soybean Agribusinesses
		Commodity Assessment of Meca Vinegar Workshop
		Workshop preparations on how to export to US
		A new sub project "Valor Agregado al Frijol" has been initiated to facilitate export and value added processing of beans.

The observed quality of CASP activities was high. However, direct partnering with US CASP partners appeared only in very few examples. INTSOY was the most active, providing funding for Zamorano to organize and manage a conference on soybean processing technology in the Dominican Republic. Funds came from the American Soybean Association through INTSOY contacts. Kansas State University provided a technical advisor for development of grain storage and certification program in Central America as did Mississippi State on seed certification systems. PIP provided copies of a technical manual to Zamorano for a workshop on a methodology to analyze post-harvest problems.

Zamorano will continue as an important agricultural school in Honduras beyond the life of CASP. Globalization issues are not new to Zamorano as their charter is to prepare young men and women for agricultural careers, increasingly in businesses associated with trade opportunities. The CASP activities

were managed within the Department of Agricultural Economics with direct links into other departments.

### 4. Summary of Results.

The evaluation team saw high quality of performance of CASP services. The number of activities undertaken through CASP is low and the primary cause is AID budget reductions and the elimination of the BOA. Initiative taken by university staff to seek outside funds was successful, although the resources captured fell well short of the expected total expenditures expected under the grant. At the same time, multiple examples of the tenuous nature of AID support has produced a palpable sense of reduced enthusiasm.

All of the units of CASP have first hand knowledge of the new policy framework facing developing and transition economies. As land grant universities, they are prepared to work with private firms responding to market prices, a major goal of AID. Trade, or globalization, is a fact of life and although rhetoric outweighs action, internationalization of curriculum, research, and outreach programs is a major goal for all schools. Political support for more aggressive programs to engage in development and trade related work varies by state but appears to be growing.

Administrative services provided by Mississippi State University appear to be first rate. As CASP was primarily an administrative arrangement for AID's benefit, and difficulties arose to maintain a consistent and predictable level of funds, the CASP leader is to be commended for maintaining a situation of low friction over a shrinking budget. However, little program synergism was noted among the CASP universities. (13)

#### III. Issues and Observations

During the course of the evaluation, and pondering factors for any future program, several issues arose which merit examination during the design of a follow-on program. Some of these may shed light on broader issues of university participation in AID programs where multidisciplinary cooperation and management are required.

A. In most countries where CASP has attempted to work, policy reform has not been followed by policy implementation. In order for CASP to have success, given AID guidance on stimulating private initiatives in food industries, market policies have to be accompanied by institutional changes to implement those policies.

Most countries have not taken the necessary steps to go beyond policy pronouncement. The result is a disharmony between policy pronouncements and the public and private institutional base to implement the policies. A new program needs to be prepared to assess the policy framework, including institutional policies, to make judgments on which food industries offer the greatest probability of success.

B. University models for implementation of post-harvest project.

CASP members used two models for implementation of the AID grant for post-harvest, international activities. The first can be called the "inside" model. The Dean's office, the Director of the Experiment Station, or a Department Chair, provides oversight to AID grants. Existing departments or university service units combine forces to provide services--research, education, and outreach--to domestic and international clients.

The second model is "external" to the formal administrative system of the college or university. A unit is

established to manage program funds. Internal units within the university and several colleges house technical staff resources. The external puts together ad hoc teams to meet a specific terms of reference. Money is allocated, planning conducted, follow-on and monitoring achieved, and required reports collected, prepared, and distributed. The professional staff of the external unit can be drawn from experienced technical professionals but the task is administration, not research, teaching, or outreach.

Each model offers advantages and disadvantages to AID and university partners. Common for both are those biological attributes of the material under review is an important determinant of the pace of progress. Add to this the need to build a team approach among the several disciplines--located in different college departments--increases the time from initiation to delivery of results. Management efficiency is often more difficult to achieve inside a college or university.

An external unit may also fit university objectives especially in cases where internal multidisciplinary "teams" of targeted research, teaching, and outreach programs are not required for long-term goals of the university or college. The creation of specialized institutes or programs in universities is a common means to collect disciplines toward a common goal. In the case where a grant supports an activity which is not linked to a major a major program goal of the university, then an outside, temporary "management" unit may serve all parties.

A contrary view is evident when the university views a grant as a component of a longer-term goal. Internationalization of a university to better serve the state, students, and domestic interests appears to be strengthened by new attention to globalization issues. In these cases, internal management of international grants coincides with state political interests and long-term goals of the university. Management and administration of such grants inside the formal structure of a university would seem to provide benefits beyond the life of any one grant.

The CASP program used both internal and external administrative systems. The Post-harvest Institute for Perishables at the University of Idaho is largely outside of the formal structure of the College of Agriculture. Operational decisions are within the Institute, rarely requiring input from the university. Informal linkages, well established, provide the means for communication and cooperation among the Institute, faculty, departments, college and university administration.

The Food and Feed Institute of Kansas State University is inside the university. The program leader makes operational decisions but support services and links to academic departments are formalized. The Director is a faculty member of the Department of Agricultural Economics, non-tenured, and works very closely with the Department of Storage Science of the same college. The bureaucratic systems of the university are utilized to spend and account for fund and day to day decisions is the responsibility of the Director. The grant is closely linked to university goals to provide educational, research, and outreach to domestic agricultural industries. A major department of the College of Agriculture testifies to the importance to the university.

At the University of Illinois and Mississippi State University, the CASP-supported programs are formally under the direction of a college academic department. Department chairs exercise oversight of these special programs and are involved in operational decisions.

## C. University Grant Management.

Standard procedures assign a Principal Investigator, normally a faculty member, as the manager of grant funds. The practice assures that the scientist/faculty member identified most closely with the grant is the appropriate university employee to maintain strong control over the granted resources. Once appointed, university tradition dictates a "hands-off" approach even for the highest level of university

administrators. This practice is long-standing and has served the academic community well, especially when the research is confined to one or closely related scientific disciplines.

However, grants for international work--less research than delivery of research results via technical advisory services, short-term training, and limited applied research--require continuous interaction among several disciplines, departments, colleges, and often partnered public and private institutions. Compromise is needed often to balance an individual faculty focus with overall program goals. Then a university leader is charged to manage grant funds to best meet university program goals which may or may not conflict with the short-term interests of a particular faculty member. A change of title from "Principal Investigator" to "University Program Manager" is more than a semantic change; it connotes a different way of thinking about how resources can be allocated to best achieve stated goals of the university program, across departments and colleges. (14)

# D. State Politics and International Programs.

The long history of public university participation in AID programs tends to mask the inherent conflict between general support for AID to "help people help themselves" and the desire to limit potential competition for products important to the economic well being of the state. The conflict is readily apparent in various restrictions placed on AID activities by Congress to protect domestic interests, particularly agricultural interests. The same attitude which produced restrictions on AID (dating back to the 1960's), produce limitations on the degree state universities should have a strong international element to all programs.

Trade benefits to the United States of mature economies was demonstrated in theory long ago and quantified in studies showing high levels of US agricultural exports to former recipients of AID funds. The benefits, of course, occur over time. The short-term costs to American producers of similar products are given higher weight. What is true in general -more trade benefits--does not compensate individual farmers when their international markets or domestic markets are supplied from foreign sources, especially from places which receive or used to receive AID funds. Some mid-western universities are still faulted today for using AID funds to "develop" soybeans in Brazil even though with the advantage of time, the reasons for Brazil's success are found elsewhere. (15)

The result was that state governments tolerate international programs as long as the costs do not come from state taxes. A very clear line is drawn in states where the economy depends heavily on agricultural production and processing and sales to distant markets. It was, and is for many, a political minefield for Deans of Agriculture who encouraged international thinking in faculty and staff and eagerly sought AID funds for international programs.

#### E. The Traditional Trinity of Land Grant Universities and Globalization.

International agricultural programs are often separated from domestic focused research, education, and outreach of land grant universities. Foreign activities are still viewed by many as "missionary or goodwill gestures" and not worthy of scientific attention. The experience of individual faculty engaged in foreign activities is little valued. Separate offices dealt with international affairs and are expected to be self-financing. Much of these practices and attitudes remain today even while policy statements at the President and Dean level stress the importance of globalization of the university.

The difference today is a growing realization that international trade is vital for US agriculture and new international trade organizations, often stimulated under the leadership of the United States, require new models of thinking on how to service domestic agricultural interests dependent on foreign markets. This

means that educational programs have to produce graduates who can function productively in the international arena; research programs continue basic research but with collaborators in foreign countries; and outreach will include advice and information on competing in a global economy.

If the goal of a university, and the Colleges of Agriculture in Land Grant Universities, to become more international to benefit domestic and international clients, and the political forces in the State support this goal, then separate international programs offices give way to adding an international dimension to the trinity of programs traditionally associated with Land Grant Universities. Only when the internationalization is a common university goal and management responsibility shared at all administrative levels of a university -Colleges, Departments, and Faculty--is it likely to be achieved. As a potential AID partner, this type of university is preferred.

# F. Commodity Focus.

The CASP unites four clusters of commodities under one broad umbrella of post-harvest activities. The identification of specific commodities is an outgrowth of a focus on production agriculture and companion research and extension programs linked directly to a single or class of commodities. Agronomic scientists often specialize along specific commodity lines. The Collaborative Research Support Programs, as implied in their name, retain a commodity or resource focus, appropriately, as research results on a specific cluster of commodities (or animals) is the identified goal.

Commodity focus for post-harvest activities is increasingly a hindrance as the focus changes from loss reduction to market orientation. The broad spectrum of activities--policy, market identification, product quality standards, food safety--to increase the value added of food and fiber products through post-harvest actions cuts across many commodities. Improved transport facilities--roads, ports, and airline terminals--are not commodity specific. Economic policies (fiscal, monetary, trade) are not commodity specific except when special treatment is deemed necessary. Management principals for food and fiber processing cross lines; specific characteristics of products determine how management technology is applied.

The commodity mix will vary by country and region, determined by market conditions, policies, and agroclimatic conditions. In AID supported countries this mix may include new products for newly identified markets following trade liberalization or additional value-added processes in more traditional products as determined by new market signals. The range of possibilities in any one country is wide; predetermination of which commodities will receive attention limits the potential impact of an AID program.

### G. Food Business Support.

Food Business Development may be a more appropriate label for the set of activities which encompass the transformation of raw agricultural products into higher value added products for export or domestic markets. A holistic approach--seed to consumer--better describes the necessary focus rather than attempting to distinguish post-harvest from production for bureaucratic reasons. (16) Topics include many of the actions performed by CASP members, but food business support carries explicitly the quest for profit, financial costs, and positive returns of value-added practices to meet market conditions in several settings and different markets. The technology requirements remain high; the need for highly qualified technical collaborators remains high; and, the need detailed market analyses for product lines remains high. It calls for a clear description of the policy framework in each client country to estimate financial impact on individual businesses and industries to determine a business strategy consistent with existing policies. (17)

Food businesses cannot be stimulated with the same generic tools common for generic business development. Food is different. Production and processing are science-intensive especially when food safety issues are present. Timing between production cycles, processing, and market delivery dates is critical; a week's difference can make the difference between high profit and high loss. Specialized service firms surround the food industry; if they are not there, they have to be provided by the production/processing firm, raising investment costs and risks. Timely transport is critical; specialized transport (refrigeration) is often required. Finally, if the weather turns, all is lost.

## H. Reaching New Food Businesses.

A consequence of new policy frameworks in developing and transitional countries, as noted above, is the reduction of the size of government and a desired, reduced impact on private business decisions. The first is well advanced in most countries; institutionalization of the new policies in the form of radically different legal and regulatory structures for policy implementation is far from over. A different problem exists in changing the institutional culture within government agencies who had (and some still exercise) detailed authority over economic decisions in the private sector. This was and is true in many developing countries as much as in transitional economies trying discard centralized and powerful government offices. A confusing element is that an important public sector role remains in these market-oriented policy frameworks in order to support a well functioning market system. At a minimum, authority is needed to avoid creation of monopolies in the economy.

In this setting of reduced government influence and reduced staff, the question arises as to how an AID support program can reach the private sector directly. In many ways, the problem is similar to one faced by AID for many years, and never satisfactorily resolved, in reaching countless small farmers around the world. If the goal is to assist firms to become profitable food businesses, adding value to raw product, incorporating efficient technologies into the production process, and reaching consumers in markets far and near, then an efficient means to deliver information on technology, plant management, and market development has to be created. Fortunately, there will be fewer agricultural firms than farms.

In this regard, many US universities have long-term experience in dealing with the private sector in the United States. Universities are viewed as credible sources of information to balance against marketing claims for new, privately provided products. Colleges of Agriculture meet often with important commodity organizations, trade associations, state regulatory agencies, and various components of USDA to maintain close contact on current issues for agricultural industries.

#### I. Overhead Rates.

Overhead charges represent real costs and cannot be avoided; somebody has to pay them. They do reduce, substantially, the amount of AID funds dedicated to program operations. Grant agreements require, by law, a 25% contribution from the recipient, underscoring the philosophy that grants are to support programs in which AID has a special interest to expand operations when mutual goals are present. Some of this contribution can come, of course, in forgiven overhead.

Recovered overhead is distributed in each university according to guidelines particular to that university. In isolated cases they have been returned to the state treasury. Most often, established formulas determine how recovered overhead is distributed within a university. A few of the CASP universities re-directed a portion of the funds directly back to support the AID support programs.

Overhead rates are negotiable and grant giving institutions have the option to place a cap on the percentage of overhead charges permitted under specific grants. The USDA allows, for example, a maximum of 20 per cent overhead on certain agricultural research funds. At one time, it was 10 per cent.

The rates are especially important in small grants. At forty per cent, a common rate for US universities, the \$1 million yearly grant to CASP provides only \$600,000 for all operational costs, including direct payment for on-campus staff. Little is left over to fund, or co-fund, requested applied research, training programs, or technical advisory services. It is easy to see that smaller grants may not have sufficient funds to do anything except wait at the phone for a paying client to call.

#### IV. Lessons Learned and Recommendations for the Future.

- A. The absence of stable and predictable financial support had a serious and negative impact on CASP. Reduced funding approached a point where grant funds were used predominately for home office expenses and not to extend services abroad. The cancellation of the Basic Ordering Agreement past the 11<sup>th</sup> hour dealt another blow to the viability of the program. At stake was more than money from AID missions to support the grant program. In an AID world of increasingly scarce technical staff the procurement process becomes a major barrier to funding identified technical activities at the level of \$20,000 to \$50,000. The experience of the evaluators suggest that these small ticket items are rejected because of the time required to prepare and seek approval even when funds are readily available within an approved budget. This level of funding is what permits AID mission staff to draw on the expertise of selected programs, like CASP, to advance mission strategic objectives. And these are exactly the reasons why the concept of a BOA was advanced in the first place. (18)
- B. Policy shifts around the world emphasize trade and unregulated markets and create an environment where post-harvest loss reduction gives way to a more holistic approach of "Food Business Support". Physical loss becomes less important; the profitability of the production vice processing vice marketing chain becomes the target. This is the foundation for modernization of the agricultural sector as a necessary ingredient to achieve economic and social development. The CASP universities made shifts in program content to the extent that funds would permit.
- C. A US Land Grant University remains the preferred institutional link between AID and expected private clients in AID targeted countries. Food production, processing, and marketing programs are science-intensive whether the science is manipulation of the DNA of seeds, tests of recommended processing technology, or collection and analysis of consumer behavior. Every land grant university is tied to service of the agricultural sector in the United States where private business interests dominate. Food industries are active political players to determine annual university budgets and directly fund specific research agendas to meet their needs. While universities are the preferred lead institution, success cannot be expected unless candidates can demonstrate a strategy to build linkages with the private sector and other critical partners in a support program. In other words, apply the same strategy used to include representatives of the private world into decisions.
- D. The conditions for selection have to be spelled out in a concept paper for future programs and specified in the procurement documents. It is apparent that there is no one university based Center of Post-harvest Excellence, or food business support in the United States. Rather, colleges of agriculture are creating collaborative programs with neighboring states to maintain and expand areas of excellence while continuing to provide services for all important commodity groups in their state. This is the recommended pattern for the new project: select a lead university with a strong domestic program with "virtual" links to organizations, universities, and private companies to achieve program objectives.
- E. Food business requires contributions from many scientific disciplines. Universities are commonly managed or administered by departments which tend to treat a narrow element of any given research or

teaching topic. A preference for a strong "Principal Investigator" to manage AID grant funds for multidisciplinary activities carries a risk to a biased focus on a single element of a program. Senior university staff is extremely reluctant to challenge this traditional authority (which continues to serve universities in many cases) of faculty over external grant funds. Any new AID program will require input from several fields of expertise, many of them drawn from non-university sources. The importance of a unified and comprehensive management system can not be understated. Funds will be scarce in the best of worlds; efficient use of the funds is a *sin qua non* for success.

F. Policy reform is the most important issue facing any development program today. Many nations have been forced to adopt market oriented policies and will continue to be pressured by international agencies to continue. In most countries the tedious and politically difficult task of implementing these policies has just began. It is in the process of policy implementation --changing regulations and institutional charters to coincide with the new policies-- where political conflict erupts. Can broad market-oriented polices permit the emergence of new businesses and industries in the agricultural sector? Even with favorable policies, what regulatory impediments remain which increase the cost of business establishment or to reach more favorable foreign markets? There is little doubt that such barriers continue to exist. How they impact on specific business decisions needs clarification.

## V. A Prospective Look at a future Food Business Support Program.

- A. A future program should target "Food Business Support" as the target. Taking into account the Lessons Learned and observations on several issues related to the CASP program, the following encapsulates the key elements identified by the evaluators.
- B. The institutional foundation for a new AID Food Business Support Program should be led by a lead university with a strong domestic program tied to service of the private sector in domestic agriculture. Such a program of education, research, and outreach would have an active and politically supported international dimension. To meet AID requirements for a global "food business" program for domestic and international markets, the selected university would have to demonstrate linkages with sources of expertise in the international food trade including private sector commodity and trade organizations, professional organizations of food industries, other university centers of scientific excellence, and other supportive elements with a low cost, "virtual" system of cooperation. (19)
- C. The RFA should be structured in such a way to elicit the creativity of universities on how to create and support a virtual "Food Business Support Center"; novel means of management and administrative arrangements to facilitate multidisciplinary approaches on a quick response basis; how their domestic program base, with international activities, can be utilized to address AID goals; and how to create private sector to private sector linkages between AID targeted countries and international food businesses. A key component to look for is new uses of "Internet" technologies to maintain a low cost management structure and low cost delivery to clients.
- D. The expected \$1 million annual allocation, \$5 million for five years, is barely sufficient to provide core services for a Food Business Support Program. The importance of a BOA to facilitate mission additions to the core program cannot be overstated. Additionally, a grant to strengthen and expand the international dimension of a teaching, research, and outreach program of eligible university carries value to the eventual Grantee. The overhead rates should reflect the dual benefit of the AID Grant to achieve USG international objectives as well as to add to educational, research, and outreach activities for a domestic program. The overhead rates should reflect the dual benefit to utilize the AID Grant to

strengthen international dimensions of research, education, and outreach activities for a domestic program. USDA has an established overhead policy for research funds which support research agendas important to states and the federal government. A fixed rate is established and accepted for these funds, presently about 20 percent. This rate is below established overhead rates for other types of programs.

E. Additionally, beyond the 25 per cent cost sharing required for Grants, AID should seek to limit the amount of funds from the Grant which support direct salary costs of faculty and staff associated with the administration and management of the program. The amount to be stipulated has to be further investigated; coordination and integration among and between departments, disciplines, and other cooperating entities requires that the AID Grant mesh with existing domestic competence. This will require adjustments in the way business is done today in universities in order to prevent inappropriate and narrow interests to dominate.

#### Notes:

- <sup>1</sup> Unattributed comments from AID offices questioned this statement with the following material: The *absence of stable/predictable financial support does not have a direct correlation with whether or not a BOA instrument accompanied an award. The award of a BOA did not provide any funding in and of itself, and was not a predictor of likely future funding. Thus, a BOA was not a solution to stable/predictable funding. Also, the lack of missions entering into independent procurement actions for CASP-like activities is not "proof" that it was largely attributable to a mechanism problem, and could very likely be reflective of a lack of mission desire to support such activities during a time of reduced funding and diminished emphasis in agriculture in overall USAID programs. The authors of the comment offer a numerical analysis that misses the point, as does the comments above, of the importance of a BOA highlighted in the evaluation.*
- <sup>2</sup> Non-land grant universities in agricultural states often have substantial interaction with agricultural industries as well. They too could be potential respondents to an RFA if limited competition rules so permit.
- <sup>3</sup> Initial AID/W briefing stipulated that certain decisions had already been made; among these was that any new CASP-like program solicitation would be limited to US universities. In the opinion of the evaluators, this is a wise decision with the stated caveat that program design and implementation include strong roles for private entities.
- <sup>4</sup> Reviewer's comments suggest that there may be other issues to explore to achieve cost-effective design and implementation of a follow-on project. The evaluators agree. As recommended, this evaluation has to be followed by a focused program design. Examination of alternatives, as suggested, should be done. That task, however, was not included in the SOW nor were resources allocated.
- <sup>5</sup> The point is made in the evaluation if universities do establish a high priority for globalization of their teaching, research, and outreach programs, then they should be prepared to increase their contribution, one way or another. Examples given are not exhaustive. Likewise, neither the political dynamic current in Washington on PVO complaints on cost sharing nor the reluctance of AID officers to examine USDA practices on overhead policies should preclude evaluators' suggestions on looking for alternatives to historical and ineffective practices. As expected, comments from CASP universities echo these sentiments. Again, program design is the time to examine in more detail alternatives and feasibility of those alternatives.
- <sup>6</sup> Europe cannot, for example, limit import of bananas exclusively to former colonies.
- <sup>7</sup> Comments from AID staff included a statement of history of BOA's. It is repeated at the end of the paper in an endnote entitled "BOA Comments from AID". It should be carefully reviewed when a new project design is underway.

- <sup>8</sup> We encountered three different names for the Mississippi State University Seed Laboratory, including the "Pace Seed Technology Laboratory", the "Seed Technology Laboratory", and the "Seed Science Technology Program." In this report we will consistently use the Seed Science Technology Program (STTP).
- <sup>9</sup> During our meetings with INTSOY on 16, 17 & 18 September the emphasis was always on soybeans. It was only at the end of our stay that it was indicated to us that the INTSOY mandate also includes all legumes and all oil seeds.
- <sup>10</sup> Universities were adamant and insistent that their ideas for a collaborative program were rejected and a third party, under an AID contract, did provide the foundation for the CASP initiative.
- <sup>11</sup> One comment suggested that Mississippi State University was not the provider of administrative support but the Grantee responsible for the four subgrants. However, to their credit they have not tried to dominate the partnership.
- <sup>12</sup> Communication from Mississippi State University states that the current director (of FFGI) has no retirement plans. He stated this clearly and the statement was corroborated by the Dean's office.
- <sup>13</sup> However, there appeared to be close working relations on mustering political support from the Hill.
- <sup>14</sup> As one would expect, traditional research management systems are defended by the university commentaries.
- <sup>15</sup> The Nixon export embargo on soybeans to fight US inflation caused Japan to seek alternative markets, for one.
- <sup>16</sup> At the University of Illinois, the holistic chain for product development was called "petri dish to consumer".
- <sup>17</sup> A comment from the CASP universities described a holistic approach (case by case) as a nebulous concept. This view demonstrates, in our view, the dominance of traditional disciplinary that dominates in many universities. Narrowing the problem to fit the scientific biases of a small group does not take advantage of lessons learned over the past few years. Technical solutions alone do not provide profitable businesses, food or otherwise.
- <sup>18</sup> Comment: "In conclusion, we concur with the assumption that missions would not likely undertake stand alone grants at a funding level of \$20,000 to \$50,000, but we would strongly question that a BOA had any impact on any significant mission interest (i.e., \$200,000/\$300,000 or more)." The point of the authors is that smaller procurement actions (i.e., BOAs) *are often critical to the implementation of an on-going program!*
- <sup>19</sup> Comments from CASP universities on the "virtual" nature of an implementing entity for a follow-on program should be spelled out. We agree.

Endnote Comments from AID Staff on BOA's.

"The BOA was experimented with as a companion instrument under some grants in an attempt to be more reflective of perceived differences between mission service demands versus global assistance support. Grants/Cooperative Agreements were established in USAID/W which reflected appropriated assistance support. At various times, missions would also be interested in global supported activities, and the issue would arise as to whether the mission was truly operating in an assistance support role (grants/CAs) for their proposed activity, or was really trying to order services which should be accessed under contracts (e.g., BOA, IQCs). After some experimentation with grants and companions BOAs, it was determined by Procurement that such a mixture of assistance and contract instruments was not the appropriated manner to address the above concern."

"The desired nature of the Global/mission activities (assistance vrs. Acquisition) should be determined at the time the specific activities are being developed, and the appropriate instrument (grants/CAs vs. contracts) should be utilized to implement them. If grants/CAs were determined to be the appropriate instruments, the issue of potential future mission support still needed to be addressed. Could the global USAID/W grant/CA be designed/utilized to incorporate potential mission interest, or should missions pursue stand-alone instruments? This issue has been with USAID for many years, and remains with USAID to this day with no universally agreed upon solution. In some instances, global activities are more certain of future mission interest and the initial program description is drafted to incorporate and reflect the historically based mission interest. In other instances, global activities cannot predict the extent/amount of future interest. In the later cases, the future mission

interest can either be incorporated by a negotiated modification into the global instrument, or a mission stand-alone grant/CA can be negotiated. Procurement/technical workload and management issues impact the final outcome of the above, and the final decision should be collectively agreed to by all parties.

# **EVALUATION of the COLLABORATIVE AGRIBUSINESS SUPPORT PROGRAM**

# **Annex One**Responses to Questions posed in the Statement of Work

# **Annex Two Itinerary and Contacts**

Annex One

Answers are produced from the evaluation report.

1. Q. What is the optimal means for USAID to carry out a university-based post-harvest activity under a scenario of core resource levels of approximately \$1 million annual over five years? What are the optimal means, from a current USAID contracting perspective, for USAID missions and offices to channel resources to CASP and access CASP expertise and services.?

A. One million dollars over five years buys little. Additional funds are required, ideally from mission OYB's to build worldwide links to address globalization issues in AID target countries.

The impact of a \$1 million budget will be small against the potential demand for post-harvest/food business-food security services. Additional resources from Field Missions will provide commodity and country focus if funds can be added to the grant efficiently, adding to the impact in specific locations.

The responding land grant university would demonstrate, ideally, an existing post/harvest/food biz/food safety program for domestic agricultural businesses with a demonstrated interest and active international dimension by the university for the research, education, outreach components. Private sector linkages (how to rather than specific ties) are required. A responding university would be prepared to accept additional AID funds to extend the program more aggressively to overseas locations identified by AID.

The benefits to AID are (a) minimal management costs inside AID and (2) benefit from experience of selected grantee/university on domestic and international attention to this key to economic and social development. It is possible to negotiate reduced overhead rates but it would be fairer to stipulate a maximum rate in a RFA, as done by USDA for some programs so that all potential offerors know of this condition. A university benefits from funds from AID to expand an international dimension. Depth and quality of a post-harvest/food business/food safety result and political sensitivities from using state funds for international actions are diminished. Substantial benefits accrue to the United States as overseas trading partners modernize agriculture.

2. Q. If continuation of a CASP-like program is deemed appropriate, should the CASP's organizational structure and the mechanisms in place to manage, and coordinate activities be changed. If so, how so?

A. CASP like program needs careful review before it can be determined appropriate for future AID support in the post-harvest/food biz/security arena. No meaningful synergy

- was observed among the four CASP members, an outcome AID would seek in future business-oriented programs. Mechanisms to manage and coordinate activities within a university and with university partners should be proposed by universities themselves.
- 3. Q. If USAID is to provide cutting edge post-harvest technical assistance to its missions and developing countries partners, is the current set of four institutions the right ones, i.e., are they the leading lights in post-harvest research education, research, and extension? Are they capable of leveraging private sector resources and expertise? Are they attuned to globalization of world trade? Can they provide technical leadership in international food safety standards, etc? Under CODEX Alimentarius?
  - A. A university is the preferred type of U.S. institution to address the issues in the question. Some Universities are better prepared than others to deal effectively with global changes. An open competition among qualified universities will determine if the existing members of CASP are the right ones.
- 4. Q. Should the CASP be restructured around a reduced number of commodities and institutions?
  - A. There should be no commodity specification. The number of institutions should be determined by a proposal submitted by a university (or universities).
- 5. Q. Is it feasible for USAID to devote all of its resources to program activities and cease to fund administrative costs.?
  - A. Not likely. It may be feasible to negotiate or stipulate reduced overhead costs on a grant. It would be preferred to include a stipulated overhead rate in the RFA. AID can learn and possibly use practices by USDA in their research programs.
- 6. Q. Should the next phase of CASP include establishment of Post-harvest Development Centers in other regions?
  - A. Generally, members of CASP support this concept, recognizing the difficulty of finding the right kind of quality partner in priority regions and the cost of maintaining that kind of relationship. The review of the single Development Center in Honduras strongly supports the concept if a proposed budget so permits.
- 7. Q. Are existing activities and their staff integrated into the mainstream of activities at the partner institutions? Is such integration desirable and if so, how can integration be enhanced in the future?
  - A. Integration within the formal university structure is not observed in all CASP universities. Observations and Issues in the body of the paper address this question, including the pros and cons. On a related issue, little program synergism was noted among the five members.
- 8. Q. What are the potential benefits of a program of this kind to the United States and to developing/transitional economies?
  - A. Expanded trade opportunities is the simple answer. The US has benefited as an exporter and importer of goods and services to and from developing countries. Reduced barriers to trade open doors to new food businesses for domestic and international markets.

- 9. Q. Does this activity lend itself to participation from the US private agribusiness sector, and if so, what are some possible modes of participation?
  - A. A new proposal requires participation of private business from the United States and within targeted AID countries.
- 10. Q. How has the present CASP contributed to reducing the proportion of income spent on food and improving the nutritional status of people in developing countries? Please provide some suggestions as to how this contribution can be measured and documented in the future.
  - A. The answer to the first question is implicit in the second statement. There are no reliable data available which permit the measure of income use between food and non-food items in household budgets. Attributing any change to CASP actions, or any other foreign interventions, would be a stretch. A very successful intervention would not be measurable in a large population in the short-term and longer-term measurements would include many other factors.

# **Annex Two Itinerary and Contacts**

# SEQUENTIAL ITINERARY OF MEETINGS AND PEOPLE

### AGENCY FOR INTERNATIONAL DEVELOPMENT, WASHINGTON, DC

Date	Persons Met	Purpose
8/31/98	Donnie Harrington, USAID/Global Bureau/Office of Economic Growth and Agricultural Development	Initial meeting to orient evaluation and to discuss desired meetings while with AID/W.
8/31/98	Sam Kahn, AID Project Manager for SUSTAIN	To discuss the concept of SUSTAIN and its possible application to the CASP.
8/31/98	USAID Design Committee: John Lewis, Dawn Thomas, Harvey Hortik, Tracy Atwood, Gary Alex, John Swanson	To continue orientation of evaluation, and, particularly, to discuss concepts for future CASP.
9/1/98	John Becker, USAID/Latin America/Regional Agriculture	To discuss Becker's interest in support of the present and future CASP.
9/1/98	John H. Nelson, Retired, Food Science Department, Purdue University	To discuss his and Swisher's conclusions drawn from they're various evaluations of the CASP.
9/1/98	M.E. Swisher, Family, Youth and Community Sciences Institute of Food and Agricultural Sciences, University of Florida	
9/1/98	Mark Walther & D. Kinloch	To discuss rationale for AID's decision to disapprove the use of the Basic Ordering Agreement (BOA)

# MISSISSIPPI STATE UNIVERSITY (MSU), Starksville, Mississippi

Date	Persons Met	Purpose
9/2/98	S.F. "Bud" Pasley, Program Director, Post-harvest Collaborative Agribusiness Support Program (CASP)	Discuss agenda for MSU and CASP accomplishments to date.
9/2/98	Richard Mullenax, Head of Department of Plant and Soil Sciences	Discuss Seed Science Technology Program (SSTP), including engineering and equipment related to SSTP.
9/3/98	Juan Batista, Director of the Agribusiness Institute (ABI)	Discuss the ABI and its potential for contributing to CASP Phase II.
9/3/98	Rodney Foil, Vice President for Agriculture, Forestry and Veterinary Medicine	Discuss the role of CASP in the overall mission of the Division.
9/3/98	Virgil Culver, Director of the Food and Fiber Center	Discuss the potential for future involvement of the Food and Fiber Center in CASP Phase II.
9/3/98	Charles White, Head & Douglas L. Marshall Associate Professor of the Department of Food Science and Technology	Discuss the Department's potential for providing technical leadership in international food safety standards, etc. under CODEX Alimentarius.
9/4/98	Douglas Richards, Head of Department of Forestry	Discuss potential for including forest tree seeds as a mandated commodity in CASP Phase II.
9/4/98	Vance Watson, Director of the Mississippi Agriculture and Forestry Experiment Station (MAFES)	Discuss the potential/need to integrate CASP activities and programs into the mainstream activities of MAFES.
9/4/98	John Lee, Head. & C.W. "Bill" Herndon, Jr., Professor. Department of Agricultural Economics	Discuss issues such as globalization of world trade and relevance of CASP and other development assistance activities to departmental program.
9/4/98	Joe McGilberry, State Program Leader, Enterprise and Community Development	Discuss technology transfer activities in Mississippi and potential for adapting/replicating model experiences in developing countries and transitional economies.
9/4/98	Garry Smith, Head of the Department of Management and Information Systems, College of Business and Industry (COBI)	Discuss potential involvement and contribution of COBI to CASP Phase II activities.

# UNIVERSITY OF IDAHO (Uia), Moscow, Idaho

Date	Persons Met	Purpose
9/8/98	Harvey Neese, Director; Tom Scherer, Accountant; Judy Edmister, former employee. PIP. Bob Haggerty, Research Associate, Department of Food Science and Toxicology & John Swanson, AID/W.	Initial briefing on PIP activities and discussion of evaluation purpose as well as schedule at Uia.

9/8/98	David R. Lineback, Dean, College of Agriculture	Briefing about the College of Agriculture.
9/8/98	Michael R. Whiteman, Director, International Programs Office	Discussion of Uia's international program.
9/8/98	Larry Branen, Executive Director for Institutional Planning and Budget; Brian L. Pitcher, Provost; David R. Lineback; Robert B. Dwelle, Chairman, Plant Science Division. Harvey Neese. Judy Edmister. John Swanson.	Lunch and general discussion of Uia and PIP.
9/8/98	Maury Wiese, Professor, Plant Pathology; Judy Edmister John Swanson	Food losses in the post harvest process.
9/8/98	Chuck Hatch, Dean, College of Forestry; Bob Haggerty	Postharvest losses and deforestation.
9/9/98	Mike Davidson, Bob Haggerty, Judy Edmister	Food Safety and CASP.
9/9/98	Joseph F. Guenthner, Professor; Ahmed Araji, Professor; Larry Makus, Professor; Bill Pyle; Department of Agricultural Economics and Rural Sociology. John Swanson.	Agribusiness/College research assessment.
9/9/98	James McCullough, Professor, International Business Institute, Washington State University. Bob Haggerty. John Swanson.	Discussion of PIP's development and use of "A Commodity Systems Assessment Methodology for Problem and Project Identification."

# KANSAS STATE UNIVERSITY (KSU), Manhattan, Kansas

Date	Persons Met	Purpose
9/11/98	Roe Borsdorf	General introduction and discussion of schedule at KSU.
9/11/98	David Norman, Professor; Arlo Biere, Professor; Allen Featherstone, Professor; Sandy Chapman, Coordinator for Agribusiness MBA Program; Department of Agricultural Economics	General discussion of agricultural development and KSU role.
9/11/98	Robert Hudgens, Assistant Dean for International Agriculture Programs	Continue discussion of KSU role in international sector.
9/14/98	Carl Reed, Grain Storage Specialist, Research and Extension, Department of Grain Science and Industry	Role of the Department of Grain Science and Industry in KSU's international program.
9/14/98	John E. Howard, Program Administrator, International Grains Program (IGP), Department of Grain Science and Industry	Serendipitous meeting to describe function of IGP.
9/14/98	Donna Schenck-Hamlin, Director, Information Support Services for Agriculture (ISSA).	Role of information in the post harvest process.

9,	/14/98	Marc Johnson, Dean, College of Agriculture	KSU and its role as an educational institution
			with respect to the international sector.

# UNIVERSITY OF ILLINOIS (UI), Champaign, Illinois

	Persons Met	Purpose
9/16/98	Karl Weingartner, Interim Director, INTSOY; David L. Chicoine, Dean, College of Agricultural, Consumer & Environmental Sciences; Bruce M. Chassy, Director, Food Science and Human Nutrition; John W. Erdman, Director, Division of Nutritional Sciences; Robert J. Hauser, Director, Department of Agriculture and Consumer Economics; Steven G. Pueppke, Associate Dean, Research; Michael A. Mazzocco, Food & Agribusiness Management.	Breakfast introduction to the University of Illinois and INTSOY.
9/16/98	Mike Mazocco, Rob Wynstra, PR for INTSOY; Danny R. Erickson, Training and Data Management, INTSOY; Steven T. Sonka, Director, National Soybean Research Laboratory (NSRL), Weingartner.	Discuss role of INTSOY.
9/16/98	John W. Santas, Assistant Dean, College of Agricultural, Consumer and Environmental Sciences; Lowell D. Hill, Agricultural Marketing; Harold E. Kauffman, Professor of Crop Sciences, Weingartner.	Luncheon discussion of INTSOY.
9/16/98	Chassy; Hans P. Blascheck; Susan Brewer, Food Science and Human Nutrition. Weingartner.	Food Safety Issues
9/16/98	Kristine Campbell; William E. Artz; Barbara P. Klein, Food Science & Human Nutrition Pueppke. Munir Cheryan, Professor; Food Science and Human Nutrition. Weingartner.	Food Science
9/17/98	Leroy J. Hanson, CEO, Insta-Pro "Triple F" Inc.; Ramlakhan Boodram, President, BAR N.A.; Lynn E. Clarkson, President, Clarkson Grain Co., Inc.; Arno Partner, Division Director, Latin America Office, American Soybean Association; Richard Schumacher, Director, Product Development, Asia Pacific, Monsanto Co. Weingartner.	Role of private sector with respect to INTSOY
9/17/98	Mazocco; Thomas A. McCowen, Assistant Dean, International Activities; Hauser. Weingartner.	Food and Agribusiness management.
9/17/98	Sarahelen Thompson, Agricultural and Consumer Economics. Weingartner.	STRATSOY web site.
9/17/98	Chassy, Mazzocco, McCowen, Pueppke. Weingartner.	Supper meeting to continue INTSOY discussions.
9/18/98	Weingartner, etal.	Breakfast meeting to review.

Date	Persons Met	Purpose
9/21/98	Freddie Arias, Coordinator, Departamento Economia Aplicada y Agronegocios	Met at San Pedro Sula and drove to Zamorano.
9/22/98	Jorge Moya, R., Jefe Departamento Economia Agricola; Freddie Arias.	Drove to La Venta and to El Tejar (near Soledad) to see the JOCOTE and LOOFA projects.
9/23/98	Keith Andrews, Head; Margot Andrews, Professor	Personal meeting, but also included discussion of current directions of EAP.
9/23/98	Mario Contreras, Director Ejecutiva.	Discussion of CASP and EAP projects.
9/23/98	Moya, Arias, Raul Espinal, Jefe de Tecnologia de Semillas y Granos, Alex Mayr, banker in Honduras, and Fernando Mendoza, Coordinador, Centro de Politicas Agricolas	Review of CASP activities at Zamorano.
9/24/98	Elena Brineman, Director; Clem Weber, ADO; David L. Alverson, Economics and Policy; Duty Greene, Economics; USAID Honduras	Met with Brineman and Weber to discuss their perception of CASP with particular interest in the future.

# AGENCY FOR INTERNATIONAL DEVELOPMENT, WASHINGTON, DC

Date	Persons Met	Purpose
9/28/98	Dawn Thomas	Discuss conclusions and debriefing schedule.
10/1/98	John Lewis, Dawn Thomas, Tracy Atwood, Harvey Hortik, Jerry Oweis, Gary Alex	Debrief AID/W.
10/1/98	Kimberly A. Hoffstrom, International Training Specialist: Jennifer Maurer, Program Assistant; USDA	Discuss completion of schedule and provide voucher details.